State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
HAZARDOUS SITE MITIGATION ADMINISTRATION
CN 028, Trenton, N.J. 08625

MARWAN M. SADAT, P.E.
DIRECTOR

JORGE H. BERKOWITZ, PH.D.
ADMINISTRATOR

16 JAN 1986

Ms. Janet Feldstein
USEPA-Region II
Emergency & Remedial Response Division
26 Federal Plaza
New York, NY 10278

Re: SCP - Carlstadt, New Jersey

Dear Ms. Feldstein:

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the Draft Project Operations Plan prepared by Dames & Moore for a Remedial Investigation of the SCP Carlstadt site.

Please review the attached comments and incorporate them into EPA's final recommendations. Our office will be available to discuss these comments if you have any questions, or at your request a meeting could be arranged to review any issues. You can contact my office at (609)984-3074.

Sincerely,

Chris Altomari

Chris Altomari
Site Manager

cc: Robert Soboleski, BSM
Thomas McNevin, BEERA
William Buchanan, BSO
Eric Evenson, DWR
William O'Sullivan, DEQ
Marty Rosen, OSR
John Covino, DAG

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Recd 1/21/86 Postmarked 1/16/86

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JAN 10 1986

MEMORANDUM

TO: CHRIS ALTOMARI, Site Manager, BSM

THROUGH: MARJA VAN OUWERKERK, Acting Assistant Chief, BEERA/TCS MVO

FROM: DR. THOMAS F. McNEVIN, Technical Coordinator, BEERA/TCS TFM

SUBJECT: SCP CARLSTADT DRAFT PROJECT OPERATIONS PLAN (DPOP)

Site Description

The site was used by Scientific Chemical Processing, Inc. for recycling industrial wastes from 1971 until it was shut down by court in October 1980. Prior to 1971, the site was reportedly operated by others for solvent refining and recovery since the 1950's. As SCP, liquid wastes, primarily hydrocarbons were processed to reclaim marketable products or were fuel-blended. Paint sludges and acids were also received. At the time of the shut down, over 300,000 gallons of hazardous materials were stored onsite. The 5.9 acre site is located in the Hackensack Meadowlands and abuts Peach Tree Creek, which drains into Berry's Creek. At shutdown, 18 surface storage tanks existed on site. Only 4, which contain PCBs, remain. Prior to termination of operations approximately 4,000 drums were moved from the site to the SCP-Newark property. 1979 aerial photos reveal 1-3 current or previous lagoons or pits in the northeastern corner. Sludge in the creek and soil spills measured in 1979 showed a mixture of solvents and aromatics in amount up to 1800 ppm.

DPOP COMMENTS

Page 3-3. Reference is made to "two apparent sludge disposal areas near the northeastern corner" and a "lagoon or sludge pit in the northwestern quadrant" (1979 aerial). Examination of in-house aerials from April 8, 1979 reveals what looks like 2 former and one current lagoon in the northeast, and no such feature clearly discernable in the northwest. These additional apparent features are also not featured on the site layout, Figure 3-2.

Page 5-9. While "site personnel will be prepared to upgrade...to level C", it should be noted that the previous removal work was accomplished in level C.

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Page 6-2. In addition~~al~~ to the requirements for trip blanks as stipulated, a field blank is required for every day in the field for each type of media sampled, i.e., each type of "clean" sampling equipment should be rinsed in the field with lab-supplied blank water and analyzed for volatiles in the

case of soil analyses, and for all parameters of interest in the case of water analyses. Trip blanks will be analyzed in the same manner.

Page 7-21. 7-7.5.3 Drilling Operations
Cleaning of split spoon samples when the sample taken is to be used for chemical analysis must follow HSMA standard decontamination procedures: detergent wash with water rinse, distilled deionized water (DDI) rinse, pesticide-grade actone rinse followed by complete air drying or a nitrogen blow out, followed by DDI rinse (for organics). If metals are to be analyzed then a 10% HCI rinse is substituted for the acetone rinse. A detergent & DDI rinse alone is not acceptable.

Page 7-23. 7.7.5.6 Sampling and Logging
Proposed sampler decon is unacceptable (see above).

Page 7-29. 7.8.5.3 Drilling Operations
Proposed sampler decon is unacceptable (see above).

Page 7-30. 7.8.5.5 Sampling and Logging
Proposed sampler decon is unacceptable (see above).

Page 7-35. 7.9.5 Procedures and Site Management
Any equipment which comes in contract with samples for chemical analysis must be washed as noted above. Detergent and DDI is not acceptable.

Page 7-40. 7.10.5.1 Surface Water Sampling
The collection jar plus any other equipment in contact with samples for chemical analysis must be cleaned as noted above.

Page 7-40. 7.10.5.2 Sediment Sampling
Collection equipment which contacts samples for chemical analysis must be washed prior to each sample, as noted above.

Page 7-44. 7.11.5.2 Samples from Test Pits or Hand Angers
Stainless steel spoons or scoops must be cleaned as noted above.

Page 7-48. 7.12.5 Procedures and Site Management
Sampling equipment must be cleaned as noted above.

Page 14-1. Field Control
Trip and field blanks will be utilized during the course of each sampling event for soil and water samples alike.

Miscellaneous

1. Analysis of 1979 aerial photographs indicated the presence of 2 suspicious areas adjacent to the known lagoon in the northeastern corner of the site. Further sampling should be done in these suspected areas. Two additional borings should be adequate. An additional two borings should also be made in the southern quadrant of the site to better characterize that area (Attachment A). Samples should be taken and analysed consistent will other borings on the site. The total number of sample locations is thus raised to 19.

2. The DPOP has not undergone a formal review by DWR as no geologist is currently assigned to it. The previously issued Work Plan was reviewed by Robert Gallagher who was at that time assigned to the case. Review of his memo with respect to the subsequently issued Dames & Moore DPOP produced the following conclusions.

    a. Geophysical Survey - RG's comments appear to have been incorporated.

    b. Shallow Monitoring Wells - The well distribution as first proposed by D & M has been changed under the approval of EPA Geologist Grant Kimmel. These changes are not the same as those proposed by RG, and their acceptability to DWR is unknown.

    c. Deep Monitor Wells - While a well downgradient from the sludge pit has been paired with a shallow one as requested, its location is much more eastern than requested by RG. Acceptability by DWR is unknown.

        D & M's proposal to screen up through the overlying till from bedrock in the deep wells takes into account RG's previous critiques and is thus acceptable.

    d. Pumping Tests - Criticism here has been rendered moot by D & M's adoption of slug and injection tests for in-situ permeability testing. This change is acceptable to DWR (verbal communication with RG).

5. Analytical Program - The request to remove TOX as an analysis has been satisfied.

6. Drilling Procedures/Well Construction Procedures:

    a. All screen and casings must be of schedule 40 stainless steel.

    b. All other details in conflict with NJDEP monitoring well requirement have presumably been rectified in that a copy of these requirements have been incorporated into the DPOP as a table.

7. Soil Sampling - While the proposed sampling rationale is not in conformance with the suggested changes of RG, with the additions noted above, it is acceptable to this writer. It should be noted however that further sampling might be requested in the future such that any detected hot spots might be more precisely delineated, pending a choice of remedial action alternative.

HS132:jrs

cc:Dr. Merry L. Morris
Eric Evenson, DWR

ATTACHMENT I

Comments on the Remedial Investigation
and Feasibility Study of the
SCP Carlstadt Site

1. Figure 4-1 - Feasibility Study

The tasks associated with the feasibility study are scheduled to be completed, and a draft report submitted by week twelve (12), yet the field work and analyses will not be completed until week twenty-four (24). The field data will certainly affect the development and evaluation of the remedial alternatives. Therefore, the schedule should be modified to perform the study towards the end or at the completion of the investigation work.

2. p 7-9 and 7-10, Personnel Protection

The report states that when air levels are detected for carbon tetrachloride at 5 ppm or chloroform at 2 ppm or greater in detector tubes, or if the PID or OVA readings are greater than 500 ppm, the protection level will be increased to level B, and the personnel will leave the area until appropriate equipment is obtained, or the levels become abated. Explain how these action levels and compounds were selected. 500 ppm for organic vapors appears excessive as an action level. NJDEP often uses 5 ppm above background as an indicator for level C conditions.

3. p 7-19 Monitoring Well Program

a) The report recommends seven (7) shallow wells and three (3) deep wells. The contractor should consider placing the screens for the shallow wells below the meadow mat. The screen interval should not include formations above and below the meadow mat.

b) The report states that deep wells will be continuously sampled to bedrock. Clarify if this means split spoon samples every 2 feet.

c) The NJDEP-Division of Water Resources Well Permit Office should determine if the riser pipe or casing should be PVC or black steel, along with a stainless steel screen.

d) Well Testing - The shallow wells will probably be influenced by tides, and this affect should be documented using water level recorders. The tidal effect could influence the efficiency of remedial actions such as collection trenches or recovery wells.

e) The stainless steel casing and/or screens must be thoroughly cleansed of cutting grease before they are used on site. The decon procedures should include a detergents scrub; a rinse with potable water; steam cleaning; and a wash with acetone.

f) Downhole air monitoring using a PID or OVA should be performed continuously during the drilling of all wells and piezometers. Air readings should be recorded with the geologic logs. The drillers and geologist should be equipped for level C, at a minimum during the

drilling.

g) Water level readings should be obtained using an electric probe. Water sensitive paste is not recommended.

h) Pre-cleaned bailers should not be stored in plastic bags. They should be stored in tin foil.

i) Extensive decon procedures are recommended for the sampling equipment because their integrity will certainly influence the analytical quality. The decon procedures for use on all sampling equipment are attached

4. p 7-37 Surface Water & Sediments

a) There are several drainage ditches on site that should be included in the sampling program. Sediment samples from the ditches would provide representative data on the concentrations which may have left the site previously.

5. p 7-42 Soil Samples (See Table 7-3)

a) Because soil samples may be obtained from the well boreholes, it is important to perform extensive decon procedures as recommended in item 3(i) on the split spoon samples.

b) Use of OVA or PID readings are not an appropriate basis for a soil sampling program. A pre determine grid pattern and sampling interval should be provided.

6. p 7-50 Underground Pipes

a) The report should provide a minimum number of samples which will be dedicated for this task.

b) The investigation should include the identification of all above ground and underground storage tanks, pipelines, etc., and the previous use of each. This information should be plotted on a site map, and a brief summary provided on the use of each tank, its age, and existing conditions.

7. p 7-52 Air Monitoring

a) Ensure that air monitoring is performed in conjunction with all sampling activities and that the information is recorded and submitted in the draft report. This data will certainly affect the Health and Safety Plans.

b) The use of detector tubes are often not very helpful, because they can be easily influenced by weather conditions.

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ADMINISTRATOR

30 DEC 1985

MEMORANDUM

TO: CHRIS ALTOMARI, SITE MANAGER 2 JAN 1986
BUREAU OF SITE MANAGEMENT

FROM: WILLIAM J. BUCHANAN, ON-SITE COORDINATOR William J. Buchanan
BUREAU OF SITE OPERATIONS

SUBJECT: DRAFT RI/FS on the SCP CARLSTADT SITE

The following are comments to the draft RI/FS by Dames & Moore for the Scientific Chemical Processing - Carlstadt Site:

7.2.5 Health and Safety Plan

The soil contamination throughout the site although visible in some areas by discoloration may have been obscured by the mixture of fly ash utilized in the surface removal action. Other highly contaminated areas may show no visible effects. It has also been determined that high level PCB waste up to 2% were handled on the site.

Due to the possible contamination of worker's clothing and inhalation of contaminated dust particles Level C with dust respirators would be appropriate. At the SCP-Newark site a recent subsurface investigation by NJDEP was conducted in Level B. PID readings of over 1000 ppm were observed during soil borings of less than 1 foot in depth. It would be advisable that an instrument operator in Level C respiratory protection measure all soil boring operations on a continuous basis.

7.4 Site Security Measures

It should be noted that the present fence does not impede access to any persons but only restricts the access of vehicles to the site. The two vehicle gates provide easy access to any person.

7.7.5.4 Monitoring Well Installation 003119

This Work Plan calls for the use of steel well screen and PVC well casing, but omits how these are to be fastened. NJDEP prohibits the use of glue type adhesive in wells to be analyzed for trace organics.

7.7.5.7 Well Development

It has been this OSC's observation that the site generally drains to the Peach Island Creek. Most of the site is landfill and due to the nature of the environmental regulations at the time of it's construction and the fact that there are discharge lines running into the creek the slope of the site into the creek was purposely created. Extreme care should be taken to prevent well development water from entering the creek. It should also be noted that the creek is at present a wildlife sanctuary with a large biota of waterfowl, fish, reptiles and amphibians inhabiting it.

As both organics and metals are to be tested for two seperate samples utilizing glass and plastic sample bottles should be indicated in the sampling plan instructions.

7.8.5.3 Drilling Operations

Cleaning with distilled water and detergent may not be practical in sub zero weather and an alternative procedure perhaps employing steam cleaning may be required.

7.10 Surface Water Sampling

This activity would not be feasible during January or February as the Peach Island Creek is usually frozen solid or has at least 2" of ice. This activity would be better postponed until April.

7.12 Ground Water Seeps

The major ground water discharge into the Peach Island Creek occurs after a heavy rain, subsequent to the surface runoff during the storm. During dry weather no oily seeps have ever been observed by this OSC. For up to 1 week after a major rainstorm seeps have been observed. Due to the high viscosity of petroleum oils in the winter months, little if any migration of this phase would be expected.

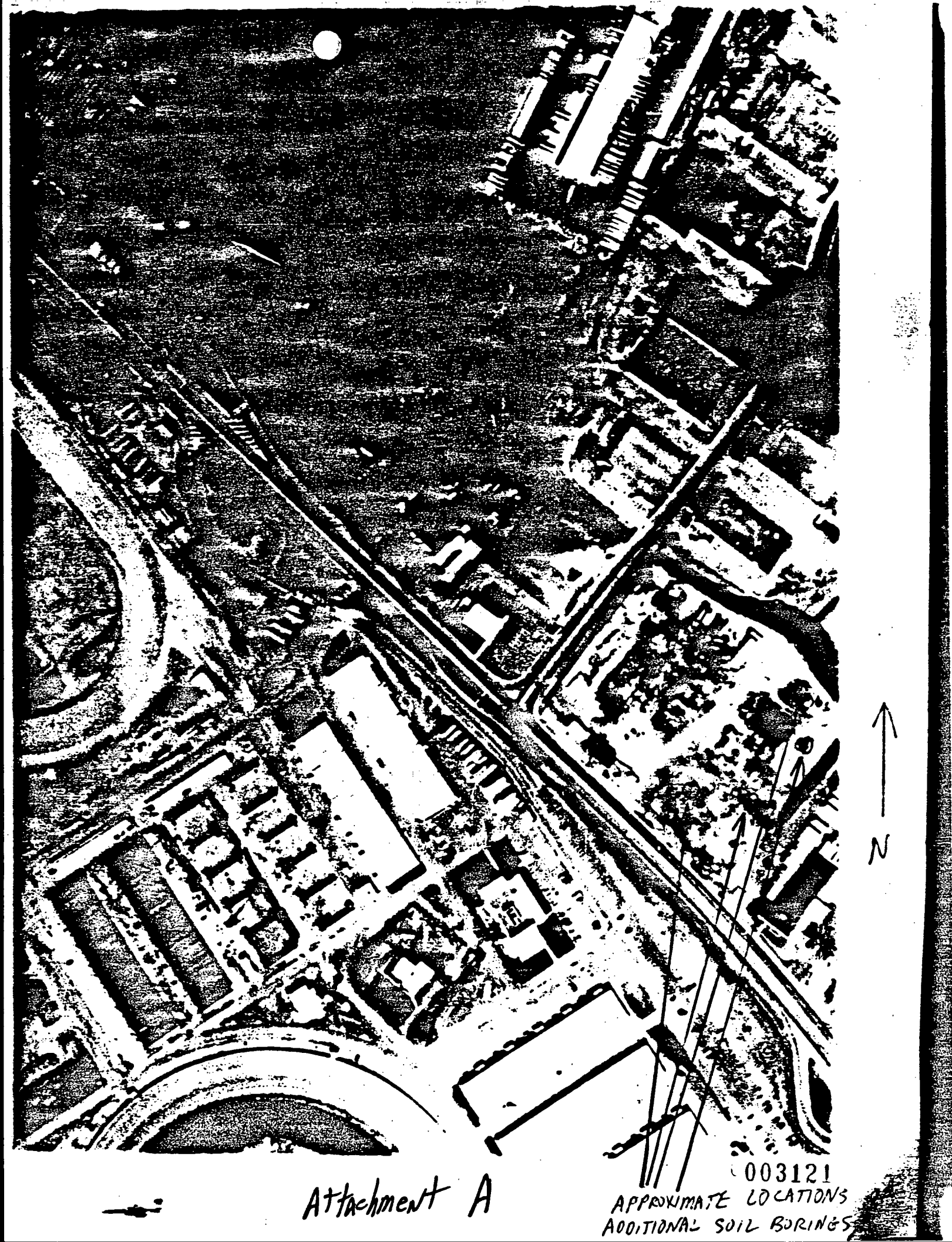
This OSC also questions why no plan for sampling storm surface runoff is included in this RI/FS.

7.13 Underground Piping

The discharge line from the main storage tank pit area is closed off by valve and its contents are unknown. This OSC has never observed it leaking or discharging any material. Another discharge line exists from the drain system for the thin film evaporator. Earthen dams were constructed by Waste Conversion around the 55 gallon drums sunk into the concrete pad to prevent runoff of water from tank cleaning.

The cut off tank which is filled with stone at the surface is not addressed in this Work Plan detailing how its size would be determined and its contents sampled and analyzed.

HS87:1



Attachment A